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Federal Communications Commission
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Price Cap Performance Review)
for Local Exchange Carriers)

CC Docket No. 94-1

Treatment of Operator Services)
Under Price Cap Regulation)

CC Docket No. 93-124

Revisions to Price Cap Rules for AT&T)

CC Docket No. 93-197

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REPLY COMMENTS OF LDDS WORLDCOM

WorldCom, Inc., d/b/a LDDS WorldCom ("LDDS WorldCom" or "WorldCom"), by its attorneys, hereby submits its reply to the comments of other parties in response to the *Second Further Notice of Proposed Rulemaking in CC Docket No. 94-1, Further Notice of Proposed Rulemaking in CC Docket No. 93-124, and Second Further Notice of Proposed Rulemaking in CC Docket No. 93-197*, FCC 95-393 (released Sept. 20, 1995) ("Notice").

INTRODUCTION

The comments confirm the need for the Commission to re-evaluate the fundamental assumptions underlying this docket. The *Notice* overlooks the crucial fact that LEC discrimination will be the number one regulatory problem facing the Commission during the transition to a more competitive industry structure. This is true for retail long distance competition. For the foreseeable future WorldCom and other non-LEC carriers will remain dependent on nondiscriminatory access to the

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LEC wholesale local network to originate and terminate calls. But equally important, retail local service competition will require new local carriers to make heavy use of the LEC local network platform at cost-based and nondiscriminatory rates. Until the FCC resolves important issues regarding the pricing of different uses of LEC network facilities, it should not grant the LECs any further pricing flexibility.¹

The Telecommunications Act of 1996 (the “1996 Act”) also will create new responsibilities for the FCC to ensure that LECs do not exercise their market power to discriminate against their competitors and block retail competition in end user services. The Act recognizes that RBOCs will have strong new incentives to discriminate in favor of themselves with respect to access as they enter the long distance market. And the Act recognizes that LECs also have strong incentives to block new local competition by denying other local service providers non-discriminatory use of the LEC local network.

Put simply, this docket will be worse than a failure if it does not improve controls on the LECs’ ability to discriminate against other carriers seeking access to LEC network facilities. Price cap regulation as currently designed does not adequately address the real-world competition issues under the 1996 Act. WorldCom suggests that the Commission put this docket aside until it completes

¹ See *Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, FCC 95-505 (rel. Jan. 11, 1996) at ¶ 17 (noting the similarity among various forms of network interconnection, including interstate access, and the relationship among pending and planned Commission proceedings addressing these issues).

the heavy workload imposed by the new Act. Then, when the Commission picks up this docket again, it should rethink its initial assumptions through the prism of the central regulatory issue during the transition to full competition -- the incentives of a LEC to discriminate in the prices charged to competitors for the use of the LEC's local network.

**I. OTHER COMMENTERS AGREE THAT
PREVENTING DISCRIMINATION IS CRITICAL**

The LECs' comments make it clear that they would like the Commission to consider pricing flexibility issues without addressing the future of the marketplace in which the LECs will operate. They apparently hope that if the Commission hears enough apocryphal evidence of the competition the LECs face in the local market, it will completely ignore the regulatory implications of the LECs' impending expansion into other markets -- or their continuing dominance of the local market itself.

The Commission, however, cannot ignore its obligation to address discrimination issues, particularly under the 1996 Act. Even before the Act was passed, non-LEC commenters broadly agreed that protections against LEC discrimination are essential. MFS, for example, notes that even facilities-based competitors to the LECs will continue to rely on LEC network inputs to provide competing local services. As a result, MFS states that "any unreasonable discrimination by incumbent LECs targeted at their competitors could severely impair or even preclude effective competition in the ultimate consumer

marketplace.” MFS Reply Comments at 4. *See also* CompTel Reply Comments at 2-5. MCI points out that “[i]f LEC rates are allowed to remain at their current levels and the LECs are granted additional pricing flexibility, the LECs will be able to unreasonably discriminate among their customers, funding rate cuts for some customers with rate increases for others, meanwhile preserving their current inflated revenue stream.” MCI Comments at 1-2.²

Furthermore, the parties agree that the consequences of discrimination will be much more serious when the RBOCs enter the long distance market. Sprint urges the Commission to undertake special efforts “to ensure that the RBOCs do not use whatever regulatory flexibility is granted to them to unreasonably favor their own interexchange operations.” Sprint Comments at 4. MCI demonstrates that by increasing the costs of their interexchange rivals while charging below-cost rates to their own long distance customers, LECs will have the ability to distort both the interexchange and access markets. MCI Comments at 6.

In their comments, the LECs make no attempt to address discrimination concerns. Most ignore the issue completely. Others claim that large IXCs simply want to expand into LEC markets and are seeking a continued regulatory advantage against the LECs -- but fail to acknowledge their own plans to enter the long distance market.³ The Commission, however, can neither ignore the

² *See also* AT&T Comments at 21-22 (Commission proposals “would afford the LECs undue flexibility that could result in increased rates and discriminatory strategic pricing.”).

³ *See, e.g.,* U S WEST Comments at 6-7.

issue nor view it through the one-sided rhetoric of the LECs. Instead, the FCC must now confront head-on the potential for discrimination that will be created by the convergence of telecommunications markets. It must take steps to ensure that the LECs do not favor their own operations in the terms and conditions under which bottleneck LEC network facilities are provided.

II. PRICE CAP REGULATION CANNOT ADEQUATELY CONSTRAIN LEC DISCRIMINATION

LDDS WorldCom will not repeat here the detailed discussion presented in our comments regarding the weaknesses of the price cap rules in controlling LEC discrimination. We assume that the Commission will review those comments with care.

The Commission must come to terms with the fact that its price cap rules -- which were designed for application to AT&T -- cannot adequately protect against discrimination by the LECs. As we explained in detail in our comments (at 8-16), there are fundamental differences between the local and long distance markets that make reliance on the AT&T price cap model inappropriate. For example, for AT&T baskets and bands served as a supplement to market forces that provided protection against discrimination. If AT&T tried to discriminate against a customer, that customer would simply purchase service elsewhere. In contrast, market forces generally do not check LEC discrimination because LECs have the only ubiquitous local network.

More fundamentally, discrimination in the pricing of LEC services has far more serious consequences than AT&T discrimination in long distance rates. Long distance is a retail service, and discrimination among long distance end users has relatively little impact on the economy.⁴ But in this docket the Commission is considering the pricing of LEC network arrangements that are necessary wholesale inputs required by all other carriers.⁵

LEC discrimination is a problem in two central respects:

Discrimination in Access Pricing. First, the *Notice* fails to adequately appreciate that IXC's have no competitive access choice in the vast majority of circumstances, especially with respect to switched access to a customer. The IXC's that must pay the bill for access to an end user generally cannot select the access provider -- at least where the customer does not have traffic volumes justifying separate dedicated access. Thus, even where end users have a limited ability to choose between a LEC and another local service provider, the IXC will remain dependent on whatever provider is chosen in order to serve that end user.⁶ As LCI

⁴ The exception has proven to be discrimination by AT&T against carriers who resell AT&T service, *i.e.*, where AT&T service is the key input to another party's retail offering to end users.

⁵ The Commission also will be regulating LEC retail long distance services, but the issue there will be less whether the LEC's prices to end users are reasonable or discriminatory, and more whether the LEC long distance rates reflect discrimination in the wholesale LEC access input. That is why structural separation of the long distance retail services reduces the level of regulation needed for such retail services.

⁶ This structural problem is addressed in more detail in "The Potential Impact of Local Competition on Telecommunications Market Structure: Diversity or Reconcentration?" by Joseph Gillan and Peter Rohrbach. This paper was presented

observes, "even if facilities-based or resale local loop competition begins to develop in certain LEC territories, IXC's will be no less captive to the local loop provider chosen by the customer than they are today." LCI Comments at 2. In other words, if a LEC loses 10% of its customer base to a competing local provider, it will still control access to the remaining 90%, and long distance providers will be just as dependent upon the LEC to originate and terminate service to those customers. Thus, the Commission cannot depend on market forces to discipline LEC access prices or prevent discrimination -- in fact, CAPs have typically established access rates that are identical to those of the LECs. See LDDS WorldCom Comments at 17.

Discrimination in Network Platform Pricing. Second, the *Notice* does not adequately address the fact that new local service providers will depend heavily on use of the LEC local network platform to create their own retail local service products. The new Telecommunications Act requires the LECs to make available

at the Current Issue Conference sponsored by New Mexico State University's Center for Public Utilities (Santa Fe, New Mexico, March 14, 1994) and reprinted in the June 15, July 1, and July 15, 1994 issues of *Public Utility Fortnightly*. For the Commission's convenience, a copy of the paper is attached as Exhibit A.

This paper discusses why local competition for end users should not be expected to create competitive access choices for IXC's in the large majority of circumstances outside of interoffice transport. This does not mean that new local service providers should be regulated in the same way as the LECs when such new providers sell IXC's access to their own end user customers, and that general subject is not before the Commission in this docket. The point here is that LECs cannot rely on early competition in the market to serve end users as an excuse for deregulation of access prices charged to IXC's. This would disrupt developing competition in the local market as well as damage long distance competition.

their local networks at rates that are cost-based and non-discriminatory. This is critical because all local service providers will need to use LEC network elements to a great extent to create their own competitive retail local services, given the realities of the cost and timeframe required to construct competing local exchange networks. The FCC will need to consider carefully how to address this discrimination problem, coordinating with the states. For present purposes, it is sufficient to note that LEC price cap changes can only be evaluated on the basis of how they address this new central regulatory problem under the 1996 Act.

The Commission has acknowledged in the context of its *Expanded Interconnection* proceeding that price cap rules are inadequate to control the potential for discrimination when LECs are providing an essential input to carriers with whom they compete.⁷ Instead, the Commission required the LECs to demonstrate that the loadings of direct costs and overheads contained in their expanded interconnection rates are not discriminatory. Because the LEC tariffs did not comply with this requirement, the Commission eventually was compelled to prescribe maximum overhead loadings for the LECs on either an interim or permanent basis.⁸ The Commission now faces -- on a much broader scale -- the

⁷ See, e.g., *Expanded Interconnection with Local Telephone Company Facilities*, 6 FCC Rcd 3259, 3267 (1991) ("initial charges for rate elements implementing expanded interconnection for the provision of special access should be subject to special scrutiny insofar as they apply to interconnecting parties, many of whom are the LECs' competitors.").

⁸ See *Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection Through Virtual Collocation for Special Access and Switched Transport*, 10 FCC Rcd 6375, 6377 (1995).

same competitive situation that it did in the context of expanded interconnection. The suggestion that price caps alone -- much less price caps with the modifications proposed in the *Notice* -- can contain the LECs' ability to discriminate is patently absurd.

III. STRUCTURAL SEPARATION IS THE KEY TO CONTROLLING THE LECs' ABILITY TO DISCRIMINATE

Instead of relying on price caps, the Commission must create more effective discrimination protections before it considers any additional pricing flexibility for the LECs. As we described in our comments, the most effective tool for preventing discrimination is a structural separation requirement. LDDS WorldCom Comments at 24-29. Structural separation of LEC retail services from the wholesale entity that provides essential local network inputs will permit regulators' attention to be focused on the wholesale provider, allowing substantial deregulation of retail operations.

The Commission cannot ignore the critical link between wholesale/retail structural separation and its pricing policies. The Commission should condition any pricing flexibility measures it implements on separation between wholesale and retail operations.

CONCLUSION

The Commission must come to terms with the inherent weaknesses of price cap regulation in protecting against LEC discrimination. This is best done after the Commission has taken the initial steps to implement the 1996 Act, and

real local service competition has begun to develop. Even then, additional pricing flexibility for LEC retail services will be appropriate only if those services are offered through a separate subsidiary. Otherwise, LEC self-dealing will undermine competition not only for local services, but in the telecommunications market as a whole.

Respectfully submitted,

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EXHIBIT A

**THE POTENTIAL IMPACT OF LOCAL COMPETITION ON
TELECOMMUNICATIONS MARKET STRUCTURE:
DIVERSITY OR RECONCENTRATION?**

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FINAL

EXECUTIVE SUMMARY

This paper challenges the conventional view that local exchange competition, by itself, necessarily will result in increased diversity in the services available to consumers. This diversity goal is the foundation of national telecommunications policy, and particularly the drive to create an interconnected "information highway." New communications technologies may make it possible to plan for a day when the public can access a vast universe of innovative new services over the platform of their local telephone line.

Local exchange competition can foster this goal in important ways. However, it is important to recognize that such competition could lead instead to reconcentration of the telecommunications industry. The full magnitude of this danger is not recognized in most discussions of local competition. Consequently considerations of safeguards to protect diversity have been incomplete at best.

A. Flaws in the Conventional View of Local Exchange Competition

The conventional view states that local exchange competition will evolve within the boundaries of the current industry structure. New entrants will compete with established local telephone companies ("LECs") -- initially in the market for access, and later in the even larger market for local service. The conventional view assumes that this competition between old and new local service companies (referred to collectively here as "LSCs") will benefit long distance carriers ("IXCs") by reducing access prices. More generally, it assumes that diverse interexchange and information services companies will flourish as competition drives local access prices down and quality up.

This view, however, contains many important flaws.

1. *New local service carriers will compete to serve local subscribers, not IXCs.*

- The business opportunity of serving long distance companies is greatly exaggerated. Only 3% of the local telephone and access market consists of services over which the IXC directly controls the purchasing decision. To address the remaining 97% of the market, the entrant must first build its own end user customer base by offering the services that end users buy: local, retail toll and information services.**
- More specifically, because customers served by switched access do not buy separate lines for "local" and "access" service, a new LSC cannot**

sell an IXC "switched access" to a customer location unless it already has sold that customer the local loop.

2. *New local service carriers will ignore current boundaries between "local and "long distance" service.*

- The conventional view of local competition also is flawed because it assumes that new LSCs will be content to operate within the current market structure, selling local loops and exchange service to end user customers (in competition with the LEC) and local access to IXCs (also in competition with the LEC). This assumption is incorrect.
- Current boundaries between the "local" and "long distance" markets are products of regulation applicable to the traditional LECs alone. New entrants will not respect those boundaries, and will offer products that blur these lines.

B. The Potential for Reconciliation

Because of the misunderstandings of how local competition will develop, the threat to a diverse information and telecommunications marketplace has not been appreciated. Simply stated, local competition creates incentives that could lead to a recombination of telecommunication's discrete submarkets -- local, long distance, and information services. The resulting integrated market would then be dominated by the concentrated economic characteristics of the local loop market.

1. *Local competition substitutes a new "multi-bottleneck" for the single bottleneck of today's monopoly.*

- Local competition may allow customers to select among a limited number of local loop providers: the traditional LEC, a cable company, or perhaps some other vendor. Once the subscriber makes this choice, however, its selection then becomes the monopoly pathway for all other service providers. Local competition thus represents a "dividing up" of the LEC monopoly among two or more local providers -- each of whom then will enjoy a monopoly over that portion of the subscriber base they have attracted.
- As a result, local competition will not lead to a material reduction in access rates. IXCs will have to deal with several LSC bottleneck companies in an area instead of just the single LEC. This "multi-bottleneck" will control both the access to specific IXC customers, and the access to all customer loops that an IXC will require to terminate a customer's communications elsewhere in the "exchange" area.

2. *Local service companies will offer bundled "full-service" packages in competition with stand-alone long distance and information vendors.*

- **Local competition is competition for the end user. Entrants will offer bundled packages of local, long distance, information and video services to attract a subscriber base. The "full-service" focus also will provide them with strong incentives to favor their own long distance and information products with favorable access terms and costs -- just as the BOCs favored AT&T's services prior to divestiture.**
- **It is likely that only a few facilities-based local service providers will operate in any one region. Given the strong incentives of the LSCs to discriminate in favor of their own retail services, stand-alone companies (even AT&T) could be forced to reintegrate with an LSC in order to protect access to customers.**

The result could be a recombination of telecommunications markets with a few "full-service" LSCs, each controlling its own respective customer base, and each owning (or aligned with) a favored long distance network and menu of information services. The promise of an information rich and diverse telecommunications network would be lost.

C. *Regulatory Responses to Advance Diversity*

New regulatory principles are necessary to protect diversity against the danger of reconcentration in an environment of local exchange competition. Those principles must maintain opportunities for stand-alone long distance and information companies to reach customers that otherwise would be the captives of the "multi-bottleneck" LSCs. And they must permit other vendors to offer their own full-service packages in competition with those LSCs.

1. *Equal Access Obligations Should Extend to All Access Providers*

- **As new LSCs seek to enter the local market, they should be treated the same as independent LECs who already control subsections of the overall end user customer base. Traditional LECs already bear a responsibility to provide other vendors with reasonable and non-discriminatory access to their customers. New entrants should face the same equal access responsibilities as part of becoming a local service provider.**
- **Any suggestion that the access services of current LECs should be deregulated with "local competition" should be rejected. All LSCs will retain market power over access for the foreseeable future.**

2. Local Service Should Be Available for Resale on a "Wholesale" Basis

- Most important, new rules are necessary to ensure that other carriers besides the LSCs also can offer their own full-service packages. This competition will be possible only if LSCs are required to offer a wholesale local service product that can be used easily by a long distance carrier to provide a complete end-to-end service transparently to the customer.
- Unbundling of the LEC network is not a substitute for resale. Unbundling is only valuable to a company that intends to provide facilities-based local service itself. Aside perhaps from the cable company, there will be few such providers. Hence diversity objectives require as much emphasis on establishing appropriate conditions for resale, as on the conditions for local entry itself.

3. Volume Discounts are the Inherent Enemy of Diversity

- The ability to use the information highway depends upon how local access to the highway is priced. Discrimination among potential highway users is the largest concern.
- The cost characteristics of fiber-based telecommunications are unique: high construction costs with virtually no variable cost component. Priced correctly, this cost structure could permit development of many new "marginal" network uses over the shared highway resource. Priced incorrectly, LSC affiliates or favored large customers could have disproportionate ability to use the network.
- Diversity goals demand that discrimination in the recovery of the large common costs of the local network be recognized as an ongoing danger.

CONCLUSION

Local competition can bring significant benefits. However, this paper demonstrates important flaws in the conventional assumptions regarding how local competition will develop, and how it will affect the current structure of the telecommunications market. Once those flaws are recognized, serious debate can begin over how local competition can proceed without resulting in reconcentration and diversity losses. This paper marks only the beginning of that debate.

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The Potential Impact of Local Competition on Telecommunications Market Structure: Diversity or Reconcentration?

by

Joseph Gillan and Peter Rohrbach 1/

Introduction

Competitive diversity has long been valued in American culture and telecommunications policy. Certainly, encouragement of diversity and competition has been the central theme of government policy for the past decade. Now, spurred by the momentum of the "information highway" and the perceived convergence of cable and telephone technologies, attention has turned to whether the last bastion of monopoly -- the local exchange -- may soon be added to the list of competitive telecommunications markets.

The objective of this paper is to directly challenge the conventional wisdom that local exchange competition will necessarily result in increased supply diversity in the telecommunications industry. It is generally assumed that the benefits of local competition are self-evident and inevitable. But this conventional view simplistically presupposes that local exchange competition will evolve within preexisting industry boundaries -- and that competition from new entrants will be confined to the local service market. It assumes that other markets (such as long distance) will be left intact, and will benefit as a result of this competition among local service providers.

We challenge these assumptions here. We see a significant likelihood that local competition actually could result in a reconcentration of the industry, and in particular, in recombination of the long distance and local markets. The danger is that as these markets recombine, the resulting structure could reflect the economic characteristics of the less competitive of the two -- the local market. The result would be an oligopoly of a few "full service carriers," each controlling access to its own subscriber base in what we refer to here as the "multi-bottleneck." Opportunities for stand-alone long distance and information service vendors then would be sharply reduced, with correspondingly less price competition and product innovation than today.

1/ Mr. Gillan is an economic consultant specializing in telecommunications issues. Mr. Rohrbach is a partner with Hogan & Hartson, Washington DC, whose practice centers on telecommunications regulation. This paper was originally presented at the Current Issue Conference sponsored by New Mexico State University's Center for Public Utilities (Santa Fe, New Mexico, March 14, 1994).

Clearly this would be a mammoth policy failure. The nation is making an enormous investment in telecommunications infrastructure to create opportunities for diversity and entrepreneurial competition. However, if "multi-bottleneck" local service companies are allowed to price discriminate in favor of their own affiliated long distance and information services, then opportunities for diverse other suppliers will be foreclosed, and the potential power of the "information highway" will lie dormant.

We do not wish to leave the impression at this early stage of the debate that a reversal of the competitive process is either inevitable or imminent. We agree that exchange competition has the potential to bring significant benefits to the public. Important roles can be played by both traditional local exchange telephone companies ("LECs") and other new local service carriers ("LSCs"). ^{2/}

We also recognize that some question whether local competition is even possible, much less that it will become so prevalent as to effect the changes we foresee. It is not our intention to address that issue here. Yet if one assumes that local competition can and will occur, we have concluded that it could threaten the diversity it is intended to promote.

We realize that this observation is both startling and disturbing. But until the danger is recognized, the necessary public debate concerning preventative measures will not begin. In the discussion that follows, we explain why local competition may reduce the competitiveness of the telecommunications industry. Our goal is only to set the stage for additional debate on this difficult issue. We do not pretend to have the answers, but we have identified a framework of regulatory principles that we feel must be embraced if the promise of local competition -- increased diversity in products, suppliers and prices -- is to be realized.

Most importantly, we suggest that other vendors besides the LEC and the cable company (and any other LSCs) also must be able to compete as full-service providers in the world to come. But for this to happen, LSCs must make available a wholesale local service product for resale that other vendors can easily and transparently graft to their own long distance and information service products. Without such a "bundle-friendly" resale product, reconcentration of the telecommunications market may be inevitable.

^{2/} It is useful to refer to a "LEC" when referring to an established monopoly telephone company, and to a "LSC" when referring to any provider of local exchange service, including the LECs, cable companies, interexchange carriers ("IXCs"), and new local service companies. We do not believe the term "competitive access provider" ("CAP") is particularly useful because, as discussed below, we expect LSCs to provide far more than access for interexchange carriers.

I. Defects in the Conventional View of Competitive Local Exchange Entry and Market Structure

The Conventional View

Not surprisingly, most discussion of local exchange competition is couched in terms of the existing industry market structure. This structure is notable for its clear lines and boundaries defining discrete submarkets that operate independently of one another. Local services are provided by a monopoly LEC, while customers are free to choose their (1+) interLATA long distance carrier from multiple alternatives. Overlap exists only for intraLATA calling, which consumers perceive as long distance, but that the industry model assigns primarily to the LEC. ^{3/}

The conventional view of local competition assumes that such competition by definition will promote diversity -- increasing opportunities for customers to access a large universe of telecommunications information and service companies (big and small, new and well-established) on a free and open basis. Local competition proponents envision a world in which vigorous competition among LSCs serves to drive local network prices closer to cost, and to speed the deployment of higher capacity local facilities capable of handling new services. No party would dispute that this goal is in the public interest.

In abbreviated format, local competition is expected to unfold along the following lines:

- * Regulatory bodies first open the "access component" of the local market. CAPs ^{4/} target the lucrative "switched access" market and focus on providing service to interexchange carriers.
- * Fueled by the high profits from serving interexchange carriers, the CAPs expand their offerings to include Centrex (then local) service to large customers, later offering similar services to smaller businesses. Cable companies move into the business and residential local service markets.

^{3/} Local telephone companies have recently begun to erode the significance of the exchange boundary with products labeled "expanded local calling". These products reclassify toll services as local, eliminate the need for 1+ dialing, and reduce prices below the access charges imposed on interexchange carriers. Some state commissions are moving towards intraLATA presubscription that would result in a competitive structure more analogous to the interLATA environment.

^{4/} Even the name assigned to these entrants underscores the conventional fascination with access as the door to local competition.

- * Local competition and long distance competition peacefully coexist. Long distance carriers, enjoying competition between LECs and CAPs for their business, drive down their access costs and thrive.
- * The "network of networks" evolves. The result is an "information highway" in the form of a transparent fiber platform between customers and suppliers. Diversity is the byword, as thousands of new companies are formed to provide innovative services.

However, it is not at all clear that local competition will inevitably lead to this happy result. At the least, the assumptions underlying this world view should be tested before fundamental (and perhaps irreversible) telecommunications policy changes are made based on those assumptions.

In our view, the problem with this scenario is that it assumes that local competition will rigidly adhere to the boundaries upon which existing competition depends. But the reality is likely to be quite different. These boundaries between local service and other services are largely regulatory artifices applicable to the LECs. There is no reason to expect that the new LSCs will respect them. Quite the contrary the new entrants will have every incentive to ignore these boundaries as their attention turns to the ultimate arbiter of their success -- the end user.

The Economic Imperative For New LSCs: Build A Subscriber Base

It is a simple (albeit ugly) truth that there can be no ransom without a kidnapping. This reasoning applies equally well (if somewhat more politely) to local exchange competition. The wellspring of local market power is the control of a subscriber's traffic at its source -- the local loop. As a result, LSCs will drive to capture end users so that they can then obtain "ransom" from others for access to those customers.

The conventional view of local competition fails to recognize the implications of this truth, and particularly the fact that LSCs cannot sell "switched access" to long distance companies unless they first sell local loop service to end users. The enormous customer base served by switched access does not buy separate lines for "local" and "access" service. Only one phone will ring in a given location. As a result, new LSCs have no choice but to build their own subscriber bases as rapidly as possible; they cannot depend upon marketing to IXC's as contemplated by the conventional view of how local competition will develop.

This conclusion can be quickly validated through a simple comparison of the relative opportunities presented by interexchange carriers and end users. Table 1 (below) roughly divides local telephone company revenues between those addressable at the central office (i.e., through collocation) and the subscriber's premise respectively. This dividing line is useful because it generally approximates the division between the IXC access market and the subscriber market. The IXC access market consists of dedicated interoffice circuits between carrier POPs and LEC central offices, and a portion of the special access market. It does not include revenues for services that connect to the subscriber's premise because those services, even when not purchased by the subscriber directly, require the subscriber's consent. ^{5/}

Table 1: Potential Addressable Market
(1992 Annual Revenues, Billions of Dollars) ^{6/}

	Potential Addressable Market	
	Collocation	End User
Local Revenues	\$ 0.0	\$ 30.5
Access Revenues		
End User	\$ 0.0	\$ 5.0
Switched	\$ 1.3	\$ 11.8
Special	\$ 1.5	\$ 0.6
InterLATA Toll ^{7/}	\$ 0.0	\$ 33.6
IntraLATA Toll	\$ 0.0	\$ 9.7
TOTAL	\$ 2.8	\$ 91.2
Percent of Total	3.0%	97.0%

^{5/} With the exception of special access, the IXC controls network configuration and can substitute CAP for LEC access (or self-supply) only as far as the central office. Between the central office and the customer's premise, an IXC cannot use an alternative provider without the subscriber's permission.

^{6/} Source: Statistics of Communications Common Carriers, Federal Communications Commission (1992/93 edition), all RBOCs combined. Division of access revenues between end user and collocation nodes based on ratios developed for a sample of RBOCs. This table is not exact and should not be viewed as a definitive market analysis. It does, however, fairly represent the relative market opportunities (rounded to the nearest billion).

^{7/} InterLATA toll revenues are reported net of access to avoid double-counting market potential. Furthermore, it is difficult to assign these revenues to either the end user or collocation categories since this market is addressable from either location or, as interexchange carriers have found for years, from neither. We have chosen to list these revenues under the end user category because no unique advantage results from collocation (other than the effect on access charges that is already considered).

Importantly, only 3% of the local telephone companies' revenues are addressable by a network that extends to the central office. The real opportunity rests with connecting directly with the end user -- which is exactly the same opportunity that existed prior to the collocation debate. This is partially true, of course, because local revenues far exceed access revenues.

Just as important, however, is the fact that even most access revenues (and in particular, switched access revenues) cannot be addressed unless a subscriber base already has been captured. First, "switched access" is used to reach customers who do not have the long distance calling volumes to justify a separate access line. By definition, these are customers for whom "local" and "access" service are one and the same -- a single connection is used for both local and long distance traffic.

Second, the choice concerning that access line is made by the end user. Today, this choice is simple: to have, or not have, telephone service. In the future it may involve alternatives: to choose the LEC or the new LSC. What will not change, however, is the fact that the choice will belong to the loop subscriber, not the IXC "access customer."

In other words, "switched access" is a byproduct of the subscriber's decision for local service. This observation is important in a number of respects. For an entrant LSC to tap the vast majority of switched access revenues, it must first attract a base of subscribers. 8/ But an LSC can attract subscribers only if it is able to offer the product the subscriber actually purchases: local exchange service. Thus, the conventional wisdom that "access" competition will precede "local" competition places the cart squarely before the horse. Most access competition is possible only after LSCs already have established a large customer base through local competition.

Even more critical is the implication of this relationship for future market structure. The common misconception that equates access and local competition also concludes that access charges will be forced towards cost, thereby benefiting interexchange carriers. But as we discuss in more detail below, attraction of end user customers only requires the LSC to offer competitive rates for the service that the subscriber purchases: local. Once the subscriber has chosen its local loop provider, all other users of that network component will be as much a captive of the new LSC as they are today of the LEC.

In summary, the facts reveal that the market opportunity presented by interexchange carriers -- so called access competition -- is quite limited. This misunderstanding arises from a failure of the conventional view to appreciate the

8/ We estimate that roughly 90% of RBOC switched access revenues depend upon control of the subscriber's loop.

fundamental dependence of "switched access revenues" on the subscriber's selection of its local telephone company. The reality is that local competition is competition for subscribers, and for their traffic at the source. And how competition for subscribers develops will be the determining factor of the market's future structure.

The Eroding Definition of Local Service

The conventional view of local competition also is flawed because it assumes that new LSCs will be content to operate within the current market structure, selling local loops and exchange service to end user customers (in competition with the LEC), and local access to interexchange carriers (also in competition with the LEC). However, this scenario fails to recognize that an LSC's need to attract subscribers will not be artificially restricted by these conventional boundaries. The new LSCs will not be obliged to respect those lines, and are as likely to compete with an IXC or an information service provider as to be the access vendor for such companies.

It is striking, in fact, that local competition often is discussed today without regard for its impact on the very boundaries that define its existence. Telecommunications submarket boundaries are accepted as natural and long lasting. The fact that they have remained for a decade (or longer) further reinforces the illusion of permanence. But the conventional view fails to recognize that the current industry framework rests upon regulatory, not market, factors -- and that changes in regulatory policy therefore put the continuation of that framework in doubt, and perhaps under severe stress.

More specifically, the current industry structure rests on three legs:

- (1) The boundaries that define the "local exchange" zones are simply regulatory lines found in LEC tariffs.
- (2) The LATA boundaries that clearly identify the long distance market are a product of the AT&T Consent Decree ("MFJ").
- (3) The wholesale access services used by long distance and information services companies to offer retail services to consumers over the "local exchange" network are the product of LEC tariffs established under supervision of utility commissions (and the MFJ equal access rules).

Together these factors have created the discrete interexchange market so familiar to today's industry observers. The LATA boundaries play the most important market definition role because they are associated with the concept of presubscription. This feature clearly separates the consumer's purchasing decision for "long distance" service from its purchase of other services. In the absence of presubscription, the intraLATA purchasing decision effectively remains bundled with local service. Although

customers (in most states) have the option of alternative dialing patterns to obtain intraLATA toll service separately, generally few exercise that option. ^{9/}

Exchange boundaries also represent important market boundaries, although more subtly. These boundaries define when customers must pay the higher usage prices commonly considered toll (as opposed to flat rate "free" calling). ^{10/} Put simply, IXC's cannot generally compete where LEC's decide to provide local service, even leaving aside the presubscription problem noted above.

The access tariffs provide the final component. Equal access rules applicable to the LEC's allowed carriers to enter the long distance market without the huge cost burden of building their own local network and replicating the LEC's ubiquitous facilities. Instead, all IXC's have benefited from sharing the joint economies permitted by a LEC network carrying all local and long distance access traffic together.

These boundaries and tariffs form the foundation for an industry structure with submarkets of local and toll, with competition in one submarket dependent upon access obtained in another. They also have been important to the development of new telecommunications information services that depend upon obtaining access to customers over the local network.

The conventional view is that a discrete interLATA market will continue indefinitely -- even though as recently as ten short years ago (i.e., prior to the AT&T divestiture) it did not exist at all. ^{11/} Yet as new entrants begin offering "local" service, they will tend to ignore current boundaries as artificial and arbitrary. Instead, they will define their own "local" services based on marketing and pricing decisions that may react to where LEC's draw lines, but that do not necessarily follow the LEC lines themselves. ^{12/} The cellular market provides a useful example. Within the framework of that oligopoly, carriers compete in part based on the scope of their "flat rate local"

^{9/} Special dialing patterns such as "10XXX" are used by a small portion of the market to access alternative carriers.

^{10/} The significance of the exchange boundary continues to be blurred as some LEC's move to local measured service, expand EAS, or offer other optional calling plans that span the gap between "free" local calling and traditional toll service.

^{11/} Thus, for example, there is discussion of when the Regional Bell Operating Companies ("RBOCs") will be allowed to "enter the interLATA market" without recognition of the fact that at that point the significance of LATA boundaries will disappear even for RBOCs (unless state regulators maintain those boundaries for other regulatory purposes).

^{12/} Of course, there is no reason to expect that the boundaries of a cable company's local facilities and service territory will in any way reflect those of the incumbent telephone company. The new LSC's territory may be larger or smaller than that of the LEC, or cross multiple LEC lines reselling the networks of others.